IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Paul R. Heinicke**

Serial No.: **10/682,182** Group Art Unit: **3727**

Filed: **October 9, 2003** Examiner: **Grosso, Mr. Harry A.**

For: **SPOON LEVELING PROTECTED CAN END**

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RULE 132 DECLARATION OF JOHN MORRISON

I, John Morrison, hereby declare:

1. I have been involved in the can making business since about 1960.
2. I hold a bachelors degree in chemical engineering from the Yale University and a master's degree from the University of Michigan.
3. From 1960-1965 I was employed by the Sefton Fiber Can Division of the Container Corp. of America as Technical Director.
4. From 1965-1981 I was employed by Owens-Illinois in various capacities. During this period of time, I was active in the design of can ends and the tooling that is used to fabricate can ends.
5. While I worked at Owens-Illinois I invented (together with Mr. Bill Elser) easy open ends having integrated protection against consumer finger cuts that were the subject of U.S. Patents 3,986,632 and 3,939,787, both of which are titled *Convenience Closure with Safe Edges*. These inventions were considered within the industry to be important developments in the design of easy open can ends.
6. Between about 1981 and 1991 my principal for selling easy-open can ends was Citrus Central, a can-making cooperative of Florida juice packers, which was a designer and manufacturer of can ends, including easy open can ends. Around 1991, Citrus Central

was acquired by Crown Cork & Seal Co., which was my principal from the time that it acquired Citrus Central until my retirement in 1999.

7. I consider myself an expert in the design and fabrication of can ends, including easy open can ends and can ends that have cut protection.
8. The term "easy open end" is used generally for that class of ends for containers that are provided with a built-in mechanism for permitting the consumer to open the container at the end for access to the ingredients within the container, without requiring the use of a can opener or other external tool.
9. One type of easy-open end that is in wide use is the so called "full-open" end, in which a peripheral score that is circular in configuration is formed in the end panel at or adjacent to the periphery thereof to permit its complete removal. Full-open type cans are to be distinguished from those self opening cans which have a comparatively small removable section which, when opened, provide a comparatively small hole for dispensing the product. The latter type of can end is more appropriate for packaging soda, beer, or other liquids. Full-open type cans, on the other hand, are suitable for packaging solid products such as candy, nuts, meats, or ground coffee.
10. Conventional full-open type easy open ends employ a pull tab having a pointed nose that is riveted to the end panel of the can end so that the nose rests adjacent a weakened area that is defined by the circular score. To open, the handle of the pull-tab is lifted above the rivet, causing the nose to fracture one area of the circular score. Further pulling of the tab away from the end panel then causes the remainder of the circular score to tear, thereby permitting the entire end to be opened.
11. One generally recognized disadvantage of easy-open ends relates to the sharp edges that result after the can end is opened and the consequential safety issues. The technology that I helped develop in the mid-1970s addressed these issues by providing what became known as a safety fold or the formation of one or more blunt, protective shoulders formed by folding the panel end wall near the score line.
12. It is very difficult to design and manufacture an easy open end having one or more safety folds that will actually work properly in practice. Such can ends are fabricated in a multi-step process that requires very precise tooling to create and correctly form

the safety folds. A significant amount of engineering and trial and error was required in order to successfully make the first generation of can ends having safety folds.

13. Prior to my learning of Mr. Heinicke's invention, it was my attitude and the attitude of other experts in the field that it was impossible to successfully manufacture an easy open end having a safety fold in which the easy open end had anything other than a perfectly circular opening score. The reason for this is it was felt that the internal stresses that would be created within the fold in anything other than a symmetrical, circular configuration would result in crimping or kinking of the fold that would make the resulting can end inoperable or commercially impracticable. This observation seemed especially true when considering the design and manufacture of an end containing two safety folds, one on either side of the score line.
14. To the best of my knowledge, no easy open can end having any safety fold has ever been made, prior to Mr. Heinicke's invention that is disclosed in the above-captioned utility patent application, with anything other than a circular opening score.
15. When I first learned of Mr. Heinicke's invention I was skeptical that it would be possible to make a safety fold work with a noncircular opening score. I was surprised to find out that Mr. Heinicke was successful in his efforts to develop an easy open end in a spoon-leveling configuration having an integrated safety fold.
16. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that the statements were made with the knowledge that willful false statements and the like made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,
John Morrison
Mr. John Morrison

Nov. 14, 2006
Date